WHAT IS CLAIMED IS:

1. A magnetic recording medium, comprising:

a seed layer containing at least one metal selected from the group consisting of Ag, Au, Pt, Pd, Ru, and Cu; and

a magnetic recording layer formed on said seed layer, said magnetic recording layer having a plurality of laminated layers and a noble metal layer placed between said laminated layers,

wherein said laminated layers includes a transition metal element layer containing at least one metal selected from the group consisting of Co, Ni, and Fe and a platinum group element layer containing at least one metal selected from the group consisting of Pt and Pd;

wherein said noble metal layer contains at least one metal selected from the group consisting of Ag, Au, Ru, and Cu; and

wherein a relational expression $0<Y/X\leq 1.0$ is satisfied, where X is thickness of said seed layer, and Y is a sum total of thickness of said noble metal layer in said magnetic recording layer.

2. The magnetic recording medium according to claim 1, wherein said magnetic recording layer has a plurality of said noble metal layers.

3. The magnetic recording medium according to claim 2, wherein said laminated layers and said noble metal layers

are stacked alternately for a plurality of times.

4. The magnetic recording medium according to claim 1, wherein said laminated layers are formed by stacking said transition metal element layer and said platinum group element layer alternately for a plurality of times.

5. The magnetic recording medium according to claim 1, wherein the thickness of each of said noble metal layer is at most 1 nm.

6. The magnetic recording medium according to claim 1, wherein the thickness X of said seed layer is at least 1 nm.

7. The magnetic recording medium according to claim 2, wherein said laminated layers are formed by stacking said transition metal element layer and said platinum group element layer alternately for a plurality of times.

8. The magnetic recording medium according to claim 2, wherein the thickness of each of said noble metal layer is at most 1 nm.

9. The magnetic recording medium according to claim 2, wherein the thickness X of said seed layer is at least 1 nm.

10. A magnetic recording device, comprising:

a magnetic recording medium, comprising:

a seed layer containing at least one metal selected from the group consisting of Ag, Au, Pt, Pd, Ru, and Cu; and

a magnetic recording layer formed on said seed layer, said magnetic recording layer having a plurality of laminated layers and a noble metal layer placed between said laminated layers,

wherein said laminated layers includes a transition metal element layer containing at least one metal selected from the group consisting of Co, Ni, and Fe and a platinum group element layer containing at least one metal selected from the group consisting of Pt and Pd;

wherein said noble metal layer contains at least one metal selected from the group consisting of Ag, Au, Ru, and Cu; and

wherein a relational expression $0<Y/X\leq 1.0$ is satisfied, where X is thickness of said seed layer, and Y is a sum total of thickness of said noble metal layer in said magnetic recording layer; and

a magnetic head for writing and reading data onto and from said magnetic recording medium.

11. The magnetic recording device according to claim 10, wherein said magnetic recording layer has a plurality of said noble metal layers.

12. The magnetic recording device according to claim 11, wherein said laminated layers and said noble metal layers are stacked alternately for a plurality of times.

13. The magnetic recording device according to claim 10, wherein said laminated layers are formed by stacking

said transition metal element layer and said platinum group element layer alternately for a plurality of times.

14. The magnetic recording device according to claim 10, wherein the thickness of each of said noble metal layer is at most 1 nm.

15. The magnetic recording device according to claim 10, wherein the thickness X of said seed layer is at least 1 nm.

16. The magnetic recording device according to claim 11, wherein said laminated layers are formed by stacking said transition metal element layer and said platinum group element layer alternately for a plurality of times.

17. The magnetic recording device according to claim 11, wherein the thickness of each of said noble metal layer is at most 1 nm.

18. The magnetic recording device according to claim 11, wherein the thickness X of said seed layer is at least 1 nm.